

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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EPA ID No. AZD330314479  
Report No. R(84)2122

2 3 APR 1984

Harold G. Watson  
Universal Propulsion Company, Inc  
Black Canyon Stage 1, Box 1146  
Phoenix, AZ 85023

Dear Mr. Watson:

On March 19, 1984, a hazardous waste investigation was conducted at your facility. During the course of this investigation, information was gathered in accordance with Section 1007 of the Resource Conservation and Recovery Act of 1976. A copy of our investigation report is enclosed for your information.

If you have questions related directly to technical aspects of this report, please contact Daniel Shane at (415) 574-3361. Questions related to compliance with State hazardous waste laws should be directed to the Arizona Department of Health Services, Bureau of Waste Control at (602) 258-1159.

Sincerely yours,

Original Signed By:

Kathleen G. Shimmin  
Chief, Field Operations Branch

Enclosure

cc: Bill Williams, AZDORS (w/enc.)

bc: Blais (T-2-1)  
Wilson (T-2-2)

T-3-2:Shane:Rich:TOX-57:4/18/84

CONCURRENCES

SYMBOL	T-3-2	T-3-2	T-3.				
SURNAME	Shane	Mandel	Shimmin				
DATE	4/20/84	4-20-84	4/20/84				

UNITED STATES GOVERNMENT

# 2-Way Memo

Subject: RCRA INVESTIGATION

From : Phil Bobel, Chief  
Toxics and Waste Programs Branch

## INSTRUCTIONS

Use routing symbols whenever possible.

SENDER (*Originator of message*):

Use brief, informal language.

Conserve space.

Forward original and one copy.

RECEIVER (*Replier to message*):

Reply below the message, keep one copy, return one copy.

DATE OF MESSAGE	ROUTING SYMBOL
4/20/84	T-2
SIGNATURE OF ORIGINATOR	
<i>Daniel M. Shane</i>	
TITLE OF ORIGINATOR	
Field Investigator	

FOLD

INITIAL MESSAGE

FOLD

Enclosed is a RCRA inspection report for Universal Propulsion Company, Inc. Phoenix, Arizona. This facility was inspected as part of our State overview program.

The inspection disclosed the following deficiencies: No waste analysis plan; incomplete written inspection schedule; No inspection logs; inadequate contingency plan; No Closure plan/cost estimates; No weekly inspections of container storage area; Non-compliance with open burning distance requirements.

REPLY MESSAGE

To : Daniel M. Shane, Field Inspections Section T-3-2  
 thru : Bob Mandel, Chief, Field Inspections Section T-3-2  
 Kathleen Shimmmin, Chief, Field Operations Branch T-3

DATE OF REPLY	ROUTING SYMBOL
SIGNATURE OF REPLIER	
TITLE OF REPLIER	

U.S. Environmental Protection Agency  
Region 9  
Toxics and Waste Management Division  
Field Operations Branch

Purpose: RCRA Overview Investigation

Facility: Universal Propulsion Company, Inc.  
2540 N. Central Avenue  
Phoenix, AZ 85029

EPA ID Number: AZD980814479

Report Number: R(84)E122

Date of Inspection: March 19, 1984

EPA Inspector: Daniel Shane  
Environmental Protection Specialist  
Field Inspections Section

State Inspector: Cynthia L. Allison  
Environmental Health Specialist  
Arizona Department of Health Services

Facility Representatives: Harold G. Watson  
President  
(602) 869-8067  
  
Larry C. Kempton  
Executive Vice President  
Director, Manufacturing  
  
William Hallas  
Director, Facilities and Safety

Report Prepared By: Daniel M. Shane

## BACKGROUND

Universal Propulsion Company, Inc. (UPCO) notified EPA as a generator and treatment/storage/disposal facility. The Part A permit application (Attachment 1) indicates storage and disposal of waste explosives by open burning. The solid waste is listed as a hazardous waste based on its characteristic of reactivity (D003) as defined in 40 CFR 261.23(8) - a class B explosive as defined in 49 CFR 173.88.

## INVESTIGATION

### Description of hazardous waste processes

UPCO is engaged in the design, development and manufacture of emergency ballastic power systems and components used in aircraft, space and underwater systems. UPCO products include rocket catapults, rocket motors, initiators, gas generators, thrusters and other pyrotechnic ballastic devices. Supporting the product line, UPCO manufactures solid propellant. Waste solid propellant from the mixing, casting and loading operations are stored in remote bunkers prior to disposal by open burning. Attachment 2 includes an UPCO product catalogue.

A typical composition of the waste propellants includes ammonium perchlorate (oxidizer-fuel); iron oxide (catalyst); aluminum powder (fuel additive); polybutadiene (rubber binder). Other oxidizer-fuels are potassium perchlorate, ammonium nitrate, and lead nitrate. The facility currently generates 800 pounds per month waste solid propellant.

Spent solvents (toluene, xylene, methylene chloride) are also generated in small quantities. Spent solvents are placed in open 55-gallon drums and allowed to evaporate into the air. The facility generates less than one drum per month spent solvents.

### Container Storage

Waste solid propellants are placed in sealed plastic bags and wood boxes and stored in DOD approved explosives storage bunkers. UPCO's Standard Operating Procedures (Attachment 3) describes the collection and storage of waste propellants.

### Disposal (Open Burning)

UPCO's Standard Operating Procedures (Attachment 3) describes the practices used by the facility to dispose of waste propellants. The facility's County Burning Permit Application (Attachment 4) describes the combustion products expected from the burning of these waste materials.

The facility does not comply with the requirements for minimum distance from opening burning to the property of others. The open burning area is approximately 500 feet from State owned property. The area immediate adjacent to UPCO's property line is maintained as a power line corridor for the Salt River Project and access to this area is restricted.

A RCRA inspection checklist has been completed for this facility and is included in Attachment 5. The inspection checklist summarizes the deficiencies found during the inspection. Attachment 6 includes a copy of UPCO's Contingency Plan.

## ATTACHMENTS

1. RCRA Part A application
2. UPCO's product catalogue
3. UPCO's Standard Operating Procedures
4. Maricopa County Burning Permit Application
5. RCRA inspection checklist
6. UPCO's contingency plan